

## CLAIMS

1 1. A method for signaling of information in a frame based transmission system,  
2 whereat the signaling information contains information necessary for the operation of the  
3 transmission system,

4 characterized by steps of  
5 inserting signaling information related to individual frames into said individual  
6 frames, and  
7 partitioning signaling information and inserting said partitioned signaling information  
8 into different frames.

1 2. A method according to claim 1,  
2 characterized in, that  
3 said inserted signaling information and said inserted partitioned signaling  
4 information is synchronized by using the given synchronization of the frame based  
5 transmission system.

1 3. A method according to claim 1 or 2,  
2 characterized in, that  
3 said signaling information and said partitioned signaling information indicate a coding  
4 mode used for coding and decoding data in the transmission system.

1 4. A method according to claim 1,  
2 characterized in, that  
3 said inserted signaling information related to individual frames indicates a coding mode  
4 used for coding and decoding data in the transmission system, said partitioned signaling  
5 information inserted into different frames of the uplink is a quality criterion for the  
6 transmission, and  
7 said partitioned signaling information inserted into different frames of the downlink  
8 indicated a coding mode used for coding and decoding data in the transmission system.

1 5. A method according to claim 1,  
2 characterized in, that  
3 said inserted signaling information related to individual frames is channel coded  
4 separately.

1 6. A method according to claim 1,  
2 characterized in, that  
3 said partitioned signaling information inserted into different frames is channel coded  
4 together with data contained in said different frames.

1 7. A method according to claim 1,  
2 characterized in, that  
3 the transmission system is a radio network system.

1 8. A method according to claim 7,  
2 characterized in, that  
3 said radio network system is a GSM system.

1 9. A frame based transmission system for signaling of information, whereat the  
2 signaling information contains information necessary for the operation of the  
3 transmission system, having  
4 means for coding and decoding of data (10, 11;20,21),  
5 means for handling the coded data in frame format (14;24), and  
6 means for transmitting and receiving the frames (15,16;25,26),  
7 characterized by  
8 means for inserting and evaluating signaling information (12;22) into and from individual  
9 frames related to said individual frames, and  
10 means for partitioning signaling information (12;22) and inserting and evaluating said  
11 partitioned information into and from different frames.

1 10. A system according to claim 9,  
2 characterized in, that  
3 means for synchronizing (10,11,14;20,21,24) are used to synchronize said inserted  
4 signaling information and said inserted partitioned signaling information according to the  
5 given synchronization of the frame based transmission system.

1 11. A system according to claim 9 or 10,  
2 characterized in, that

means for channel coding and decoding (13;23) are used to channel code and decode the signaling information provided by said means for inserting and evaluating signaling information (12;22) into and from individual frames.

12. A system according to claim 9,  
characterized in, that  
the means for coding (11;21) are used to channel code and decode the signaling information provided by said means for partitioning signaling information (12;22) and inserting and evaluating said partitioned information into and from different frames.

13. A system according to claim 9,  
characterized in, that  
the transmission system is a radio network system.

14. A system according to claim 13,  
characterized in, that  
said radio network system is a GSM system.

15. A system according to claim 9,  
characterized in, that  
said signaling information provided by said means for inserting and evaluating signaling information (12;22) into and from individual frames and said signaling information provided by said means for partitioning signaling information (12;22) and inserting and evaluating said partitioned information into and from different frames indicate coding modes used by the means for coding and decoding (10, 11; 20, 21).

16. A system according to claim 15,  
characterized in, that  
said system is a fixed part (1) of said radio network system.

17. A system according to claim 9,  
characterized in, that  
said signaling information provided by said means for inserting and evaluating signaling information (12;22) into and from individual frames indicate coding modes used by the means for coding and decoding (10,11;20,21), and said signaling information provided by said means for partitioning signaling information (12;22) and inserting and evaluating

7 said partitioned information into and from different frames indicate a quality criterion for  
8 transmission.

1 18. A system according to claim 17,  
2 characterized in, that  
3 said system is a mobile part (2) of said radio network system.

1 19. A system according to claim 18,  
2 characterized in, that  
3 said quality criterion for transmission is evaluated by said mobile part (2) of said radio  
4 network system, based on frames received from said fixed part of said radio network  
5 system.